DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021603 Address: 333 Burma Road **Date Inspected:** 04-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Mr. Xu Le Feng. No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower and Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 10

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows.

ED1-A149A/C-238, 239

NDT Notification No-08450

OBG Trial Assembly:

This QA Inspector performed randomly Visual Inspection and Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6027 (UT) report for this date. The member is identified as OBG Segment 12BW+12CW T rib I rib Butt weld. The weld designations reviewed are as follows.

DP3060-001-025. DP3050-001-023, EP3011-001-013



WELDING INSPECTION REPORT

(Continued Page 2 of 3)

SP3039-001-047, BP3024-001-038 EP3008-001-014,

SP3052-001-047

SP3053-001-034, 035, SP3051-001-037, 041 SP3040-001-038, 042

BP3023-001-038, 040, SP3038-001-034, 035

NDT Notification No-08447

This QA Inspector observed the following work in progress:

BAY 10, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053869 Perform Shielded Metal Arc Welding (SMAW) on OBG Traveler Rail. Joint identified as 26TR2-29, 30. ZPMC QC Identified as Xu Feng. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2212-Tc-U5b.

This QA Inspector observed ZPMC qualified welding personnel identified as 057220 Perform Shielded Metal Arc Welding (SMAW) on OBG Cantilever beam. Joint identified as BK16B-001-012, 013, 014. ZPMC QC Identified as Jiang Xian Bo. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-Tc-U5b. For more information see attached picture number 1.

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 054069 Perform Flux Core Arc Welding (FCAW) on OBG Traveler Rail. Joint identified as 26TR2-018, 020, 024. ZPMC QC Identified as Jiang Xian Bo. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 057266 Perform Flux Core Arc Welding (FCAW) on OBG Cantilever beam. Joint identified as BK16B-001-001. ZPMC QC Identified as Jiang Xian Bo. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2233-ESAB.

BAY 11, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 202354, 040614, 041271, 040611, 046769, 044541, 066155 Perform Shielded Metal Arc Welding (SMAW) on OBG Traveler Rail. Joint identified as 20TR2-034-011 and 20TR2-035-011. ZPMC QC Identified as Wang Chang Xin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2211-Tc-U5b.

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053316 Perform Flux Core Arc Welding (FCAW) on OBG Traveler Rail. Joint identified as 25TR2-001, 003, 005, 012, 014, 015. ZPMC QC Identified as Shao Hai Lang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 040785 Perform Flux Core Arc

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Welding (FCAW) on OBG Traveler Rail. Joint identified as 25TR1-001, 003, 005, 012, 014, 015. ZPMC QC Identified as Shao Hai Lang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 066155 Perform Flux Core Arc Welding (FCAW) on OBG Bottom cover plate. Joint identified as BK008A2-002-008. ZPMC CWI Identified as Yu Dong Ping. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132-ESAB. For more information see attached picture number 2.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Ho: 150002048250, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer